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CLAIMS

What is claimed is:

1. A programmable interpreter comprising:

5 means for receiving a command input stream, said command input stream having a command identifier;

means for encoding said command identifier into a corresponding processing component identifier; and

means for executing a processing component identified by said processing component identifier.

- 2. The programmable interpreter as claimed in Claim 1 further including means for pushing an argument onto a stack, said argument used as an input to said processing component identified by said processing component identifier.
- 3. The programmable interpreter as claimed in Claim 1 wherein said means for encoding further includes means for generating an execution stream for storage of said processing component identifier and associated arguments.
 - 4. The programmable interpreter as claimed in Claim 1 further including means for popping an argument from a stack, said argument used as an input to said processing component identified by said processing component identifier.
 - 5. The programmable interpreter as claimed in Claim 1 further including means for pushing a result of the execution of said processing component onto a stack.
 - 6. The programmable interpreter as claimed in Claim 3 wherein said means for encoding further includes means for pointing to the first item

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associated with said processing component stored in said execution stream.

- 7. The programmable interpreter as claimed in Claim 3 wherein said means for encoding further includes means for pointing to the first item associated with a second processing component stored in said execution stream.
- 8. The programmable interpreter as claimed in Claim 1 wherein said means for executing further includes means for recursively executing a processing component.
 - 9. The programmable interpreter as claimed in Claim 3 further including means for interpreting said execution stream.
 - 10. The programmable interpreter as claimed in Claim 3 wherein said execution stream is stored in random access memory.
- 11. In a programmable interpreter, a process for interpreting a command stream comprising the steps of:

receiving a command input stream, said command input stream having a command identifier;

encoding said command identifier into a corresponding processing component identifier; and

- executing a processing component identified by said processing component identifier.
- 12. The process as claimed in Claim 11 further including the step of pushing an argument onto a stack, said argument used as an input to said
 30 processing component identified by said processing component identifier.

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- 13. The process as claimed in Claim 11 wherein said step of encoding further includes a step of generating an execution stream for storing said processing component identifier and associated arguments.
- 14. The process as claimed in Claim 11 further including a step of popping an argument from a stack, said argument used as an input to said processing component identified by said processing component identifier.
- 15. The process as claimed in Claim 11 further including a step of pushing a result of the execution of said processing component onto a stack.
 - 16. The process as claimed in Claim 13 wherein said step of encoding further includes a step of pointing to the first item associated with said processing component stored in said execution stream.
 - 17. The process as claimed in Claim 13 wherein said step of encoding further includes a step of pointing to the first item associated with a second processing component stored in said execution stream.
- 20 18. The process as claimed in Claim 11 wherein said step of executing further includes a step of recursively executing a processing component.
 - 19. The process as claimed in Claim 13 further including a step of interpreting said execution stream.
 - 20. The process as claimed in Claim 11 further including a step of parsing said command input stream.

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